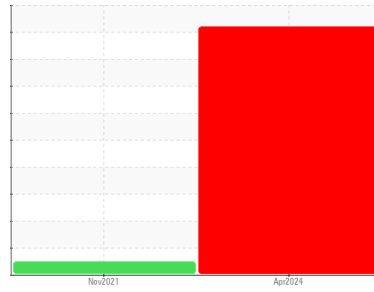




PROBLEM SUMMARY

Sample Rating Trend



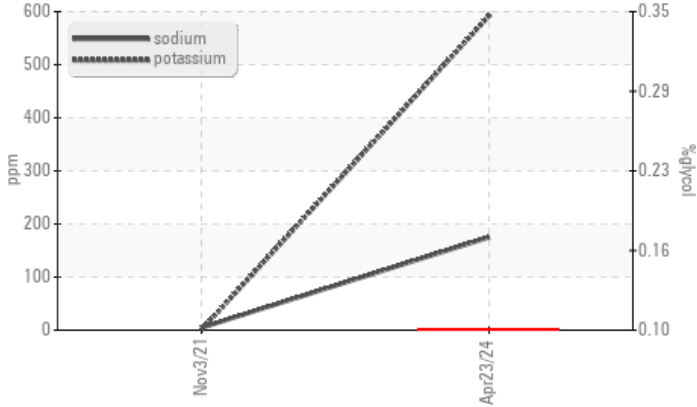
GLYCOL



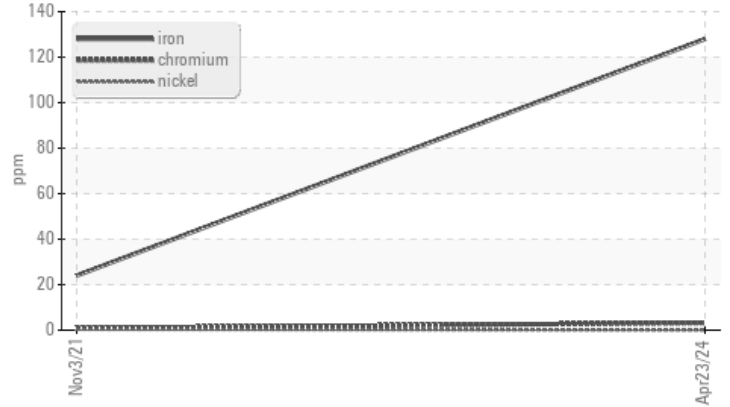
Machine Id
93076
 Component
Diesel Engine
 Fluid
AMERIGUARD 10W30 (10 GAL)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



▲ Ferrous Alloys



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	---
Iron	ppm	ASTM D5185m	>80	▲ 128	24	---
Sodium	ppm	ASTM D5185m		▲ 175	4	---
Potassium	ppm	ASTM D5185m	>20	▲ 592	0	---
Glycol	%	*ASTM D2982		▲ 0.10	NEG	---

Customer Id: SBTOMA
 Sample No.: SBP0007206
 Lab Number: 06178334
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

NORMAL



03 Nov 2021 Diag: Don Baldrige

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

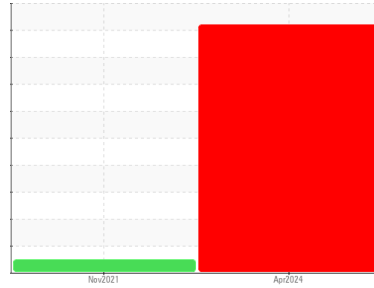
view report





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
93076
 Component
Diesel Engine
 Fluid
AMERIGUARD 10W30 (10 GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

▲ Wear

Cylinder, crank, or cam shaft wear is indicated.

▲ Contamination

Sodium and/or potassium levels are high. Test for glycol is positive.

▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		SBP0007206	SBP0000197	---
Sample Date	Client Info		23 Apr 2024	03 Nov 2021	---
Machine Age	mls	Client Info	164648	75506	---
Oil Age	mls	Client Info	89142	10836	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			SEVERE	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >80	▲ 128	24	---
Chromium	ppm	ASTM D5185m >5	3	<1	---
Nickel	ppm	ASTM D5185m >2	0	<1	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >30	10	3	---
Lead	ppm	ASTM D5185m >30	2	<1	---
Copper	ppm	ASTM D5185m >150	12	3	---
Tin	ppm	ASTM D5185m >5	0	0	---
Antimony	ppm	ASTM D5185m	---	0	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	26	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	66	4	---
Manganese	ppm	ASTM D5185m	2	<1	---
Magnesium	ppm	ASTM D5185m	1014	746	---
Calcium	ppm	ASTM D5185m	1273	1428	---
Phosphorus	ppm	ASTM D5185m	1012	678	---
Zinc	ppm	ASTM D5185m	1261	774	---
Sulfur	ppm	ASTM D5185m	3463	3832	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	12	18	---
Sodium	ppm	ASTM D5185m	▲ 175	4	---
Potassium	ppm	ASTM D5185m >20	▲ 592	0	---
Glycol	%	*ASTM D2982	▲ 0.10	NEG	---

INFRA-RED

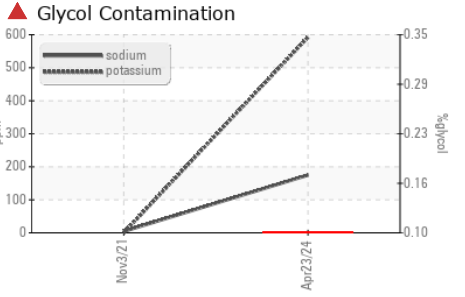
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.9	0.5	---
Nitration	Abs/cm	*ASTM D7624 >20	18.5	11.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	35.8	27.7	---

FLUID DEGRADATION

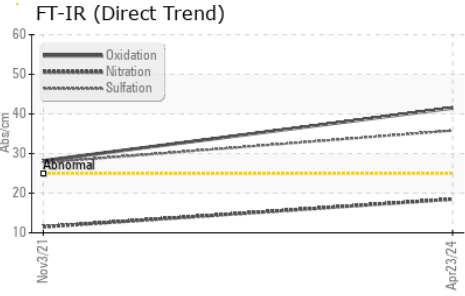
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	41.5	28.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	4.0	5	---



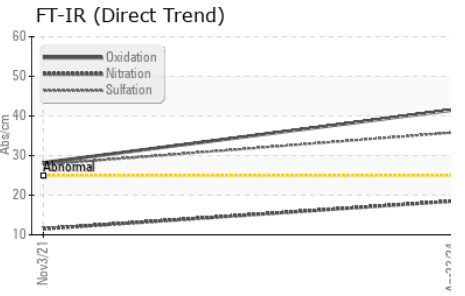
OIL ANALYSIS REPORT



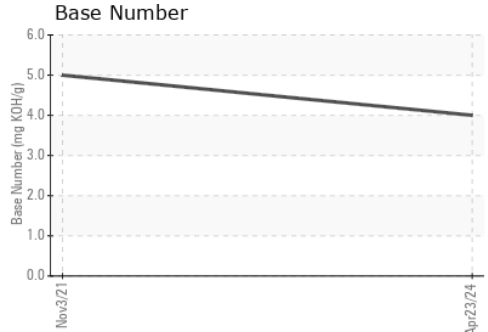
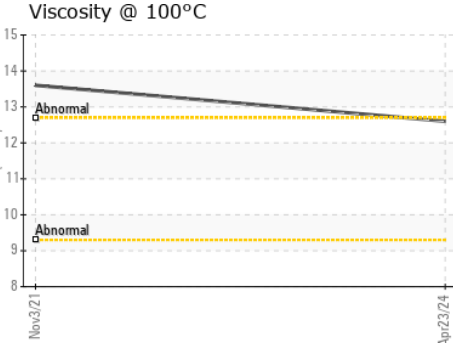
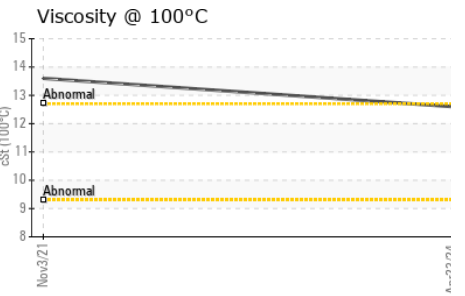
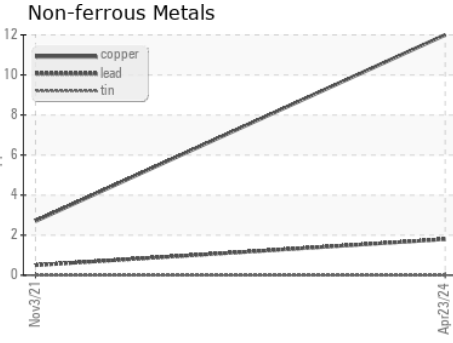
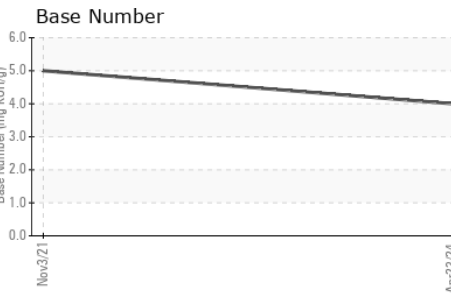
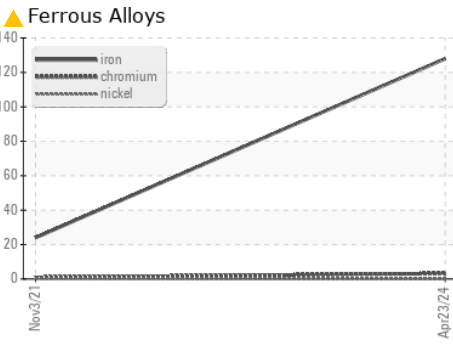
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.6	13.6	---



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0007206 **Received** : 14 May 2024
Lab Number : 06178334 **Tested** : 16 May 2024
Unique Number : 11029660 **Diagnosed** : 16 May 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: Glycol)

Sapp Bros. Fleet - Omaha Petroleum Location
 9915 South 148th
 OMAHA, NE 68138
 Contact: Stephanie Kelly
 skelly@sappbros.net
 T: (800)211-8589
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)